

CLIPPEDIMAGE= JP362056557A
PAT-NO: JP362056557A
DOCUMENT-IDENTIFIER: JP 62056557 A
TITLE: STAINLESS STEEL MATERIAL EXCELLENT IN
NEUTRON-ABSORPTION CAPACITY AND
ITS PRODUCTION

PUBN-DATE: March 12, 1987

INVENTOR-INFORMATION:

NAME

FUJIWARA, MASAYUKI

UCHIDA, HIROYUKI

OKADA, TAKESHI

MATSUDA, FUMIO

ASSIGNEE-INFORMATION:

NAME

COUNTRY

KOBE STEEL LTD

N/A

APPL-NO: JP60196987

APPL-DATE: September 6, 1985

INT-CL_(IPC): C22C038/50; C21D008/00

ABSTRACT:

PURPOSE: To develop a stainless steel remarkably excellent in neutron-absorption capacity, having superior hot workability, cold workability and secondary operation properties and further excellent in castability, mechanical properties, corrosion resistance and weldability by adding specific elements excellent in neutron- absorption capacity, such as Gd and the like, to a stainless steel.

CONSTITUTION: As a stainless steel having superior neutron-absorption capacity

for use in a neuclear reactor and facilities for manufacture, handing, transportation, storage and waste disposal of nuclear fuel, a stainless steel ingot having a composition containing, by weight, 0.1~3.0% Gd, 0.01~0.15% C, <1.5% Si, <2.0% Mn, <0.045% P, <0.03% S, 7~35% Ni, 15~30% Cr, <5% Mo, <1% Ti, <2% Nb and <0.3% N or further containing <0.1%

Co is used. The above stainless steel ingot is heated to $1.050 \sim 1.150^{\circ}\text{C}$ and a Gd-rich phase is dispersed finely and uniformly by a single hot or cold working, so that property of secondary operation to products, ductility, toughness and weldability can be improved.

COPYRIGHT: (C)1987,JPO&Japio